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1. (Amended) A method of regenerating a biosensor of the type having a signal generating portion responsive to some property of or to the presence of some component in a biological fluid, and having a flow passage through which fluid is being passed at selectable flow rates, the method comprising:

(a) passing a background flow of fluid without response generating components through the flow passage;

(b) at a selected point in time introducing a sample aliquot into said background flow; and

[characterized by]

(c) increasing the flow rate of the background fluid at a point in time when at least a fraction of said sample aliquot has entered said flow passage.

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3. (Amended) The method of claim 1 [or 2], wherein said flow rate is increased by 5-100%, preferably 10-50%, most preferably 15-30%.

4. (Amended) The method of claim 1 [or 2], comprising maintaining the increased flow rate until the signal from the sensor has reached a preselected value.

6. (Amended) The method of [any preceding claim] claim 1, wherein the increased flow rate is maintained for 10-60 s, preferably 20-40 s.

7. (Amended) The method of [any preceding claim] claim 1, wherein said background flow is 0.1 - 10 ml/min., preferably 1 ml/min.

8. (Amended) The method of [any preceding claim] claim 1, wherein said increase in flow rate is initiated when the entire sample has entered said flow passage.

9. (Amended) The method of [any preceding claim] claim 1, wherein sample is continuously drawn from a sample source, and when not being analyzed it is disposed as waste.

10. (Amended) The method of [any preceding claim] claim 1, wherein the sample is blood, optionally premixed with anticoagulant.

12. (Amended) A system for continuous monitoring of analytes in a biological fluid, the system having increased life

by virtue of inherent regeneration of sensors employed, the system comprising:

(a) a biosensor [(26, 30, 32)] of the type having a flow passage through which fluid is being passed at selectable flow rates, and a signal generating portion located in said flow passage and responsive to some component or property of a biological fluid;

(b) a sampling device [(4)] for providing a sample of said biological fluid;

(c) means [(10, 15, 18, 24)] for passing a flow of a background fluid through said flow passage at selectable flow rates;

(d) means [(20, 50, 55)] for injecting said sample into said flow of background fluid at selectable points in time to provide a combined flow;

(e) means [(50, 55)] for increasing the flow rate of said combined flow at a selectable point in time during passage of the sample through said flow passage in order to achieve a washing action on the signal generating portion; and

(f) means [(30, 32)] for providing a signal from said signal generating portion.

13. (Amended) The system of claim 12, wherein said sampling device comprises a catheter [(4)] insertable in a blood vessel of a human or an animal, and tubing [(8)] connecting the catheter to the system.

14. (Amended) The system of claim 12 [or 13], wherein said means for passing a flow of a background fluid through said flow passage at selectable flow rates comprises a pump [(10)] and appropriate tubing [(18, 24)].

15. (Amended) The system of claim 12[, 13 or 14], wherein said means for injecting said sample into said flow of background fluid, comprises a valve [(20)] switchable between injection and waste disposal modes.

16. (Amended) The system of [any of claims 12-15] claim 12, wherein said means for increasing the flow rate comprises a control unit [(50)] programmed to respond to signals from said sensor.

17. (Amended) The system of [any of claims 12-16] claim 12, wherein said means for providing a signal from said

signal generating portion comprises at least one thermistor [(30, 32)].

18. (Amended) The system of [any of claims 12-17] claim 12, further comprising a connector [(100)], for connecting said sampling device [(4)] to said pump [(10)], the connector comprising:

a male [(102)] and a female [(104)] part,

a tube [(108)] of a hard material such as steel having an inner diameter, and being inserted in the center of one of said male [(102)] and female [(104)] parts and protruding from an end surface [(118)] of said part [(104; 102)];

a catheter [(106)] of a soft material inserted in the center of the other of said male [(102)] and female [(104)] parts and having an inner diameter substantially smaller than the inner diameter of said tube [(108)], and having an essentially flat end surface [(126)], wherein

the protruding end of said tube is ground such as to form a sharp circumferential edge [(112)], and wherein

the positions of said tube [(108)] and said catheter [(106)] in their respective male or female part, are such that when said male and female parts are connected, said sharp edge